



Schmidt + Bojahr

Environmental engineering expertise Engineering services for a jointly developed partially patented MYT solution.

Project services from a single source

sustainable, cost-conscious, functionally aesthetic project architecture

40 employees: a lean, productive, and flexible structure

Cultural and linguistic diversity.

Close proximity to MYT => direct, fast, uncomplicated dialogue, cost-effective

Schmidt Architects

Consultation, planning and implementation of

Industrial and production halls

Office buildings

Single or multiple dwellings

Trade fair construction

Shop designs

Motorway service areas

Architectural + urban development projects

New construction and renovation measures

With our work emphasising:

Energy and cost-optimized residential + commercial housing

Integral planning

Building for the older generation

Cost-optimized industrial buildings and equipment

Ecological building renovation

Bojahr environmental engineering

+ society for Environmental Bojahr mbH + Co. KG

Consultation, planning and implementation of

Energy systems and technical building equipment (TGA)

Organic waste treatment plants

Waste treatment plants

Water treatment plants

Exhaust air treatment systems

Ground water and soil air rehabilitation systems

Services for safety at work, occupational safety (safety expert) and machine safety

Occupational safety professionals

Occupational safety concepts

Hazard assessment

Risk assessment and CE conformity

SiGeKo

Safety inspection in accordance with §29a
and operational safety



Christoph Schmidt, Manager Schmidt Bojahr and Schmidt Architects



Armin Bojahr, Manager Schmidt Bojahr and Bojahr environmental engineering

SCHMIDT + BOJAHR, LONG-YEAR EXPERIENCE AND EXPERTISE

„With Schmidt und Bojahr we can offer our customers an extensive range of services from project management and consultation to commissioning with an emphasis on time and quality optimisation as well as cost certainty.“
Christoph Schmidt

General planning + consulting

Architectural and structural design, general planning (structural engineering, engineering services for all of the technical building equipment and project control) throughout all of the project phases including consulting of the building project up to the turn-key handover.

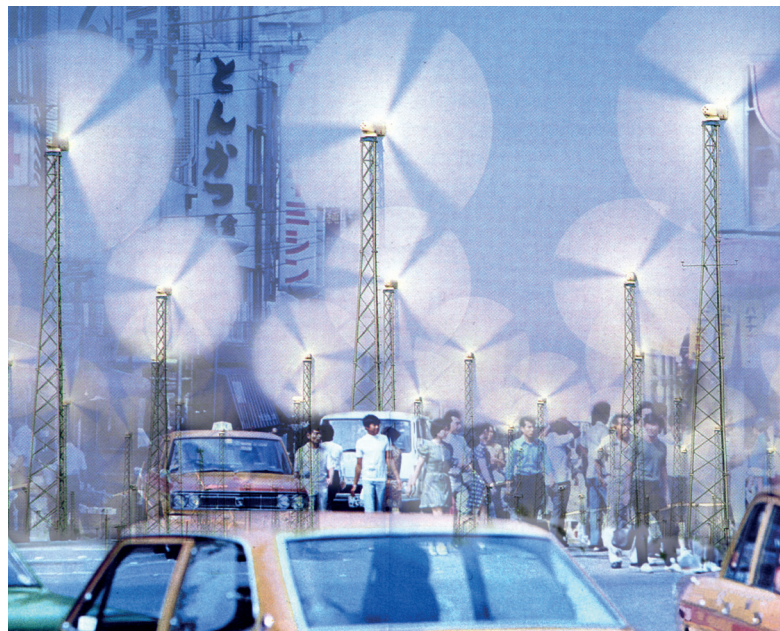
„Schmidt und Bojahr, this is long-year experience and expertise in the design, implementation and optimisation of environmental engineering projects enhanced by international project architecture experience in a flexible and productive team.“
Armin Bojahr

Industrial plants

Planning and consulting of your building project in the shape of functional, efficient, sustainable and aesthetic architecture under special consideration of the circumstances of the various locations.



Integration of the MYT in the capital plan for South Korea



Interdisciplinary Project for the City of Science Tono

INTERDISCIPLINARY PROJECTS DEMONSTRATE OUR TEAMWORK AT VARIOUS LEVELS AND IN DIVERSE FIELDS: CAPITAL PLANNING FOR SEJONG, SOUTH KOREA, CITY OF SCIENCE TONO, JAPAN

Interdisciplinary projects

These are projects which we are particularly proud of since along with their actual purpose, they particularly represent our working methods and our demands on design and functionality or the importance for our customers.

Interdisciplinary projects demonstrate our teamwork at various levels and in diverse fields.

This includes engineering firms, industrial companies and public facilities.

New capital, Sejong, Southkorea

Award:

In international competition, the integration of the MYT in the capital plan for South Korea with the 2nd was Prize. As a result, the office was tasked with further studies.

City of Science Tono, Japan

Award:

The new concept of a city of science, which was created in collaboration with physicists and environmental engineers, was awarded in an international competition with the second prize, under the theme as urban marketing with the Weissenhofsiedlung price.



All records relating to the purpose of Kahlenberg: Total system see front

THE FIVE-STAGE MODEL OF MYT®

1. Waste acceptance

A first inspection selects major contaminants and valuable materials hidden in the waste products which are then recycled or disposed of. The inspected waste products are fed to the mechanical treatment system.

2. Mechanical treatment

This automatically separates the waste products into individual components according to material and size differences. Fuels, minerals, metals and the few non-recyclable residues are selectively separated.

3. Exhaust air & water treatment (biological stage)

The new and extensively tested DAMP® process - a defined aerobic mixing process - is used to selectively crush and homogenise the waste products. Circulating water ensures suitable and stable consistency. Presses dehydrate the solids for biological drying. The separated water is first used to generate biogas, high-grade fertiliser or treated service water.

Selectively multiplied microorganisms ensure substantial and consistent biological activity, resulting in ideal stable process conditions even with seasonal temperature differences or fluctuations in the waste product composition and supply.



THE MAXIMUM YIELD TECHNOLOGY (MYT®) IS A NEW, INNOVATIVE METHOD FOR MAXIMUM ENERGY + RAW MATERIAL EXTRACTION

4. Biological drying

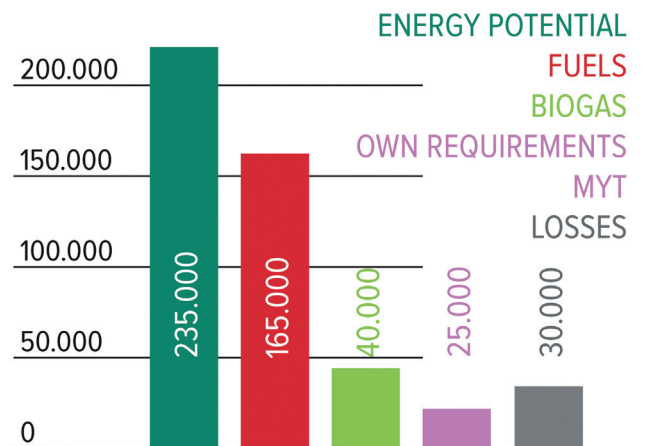
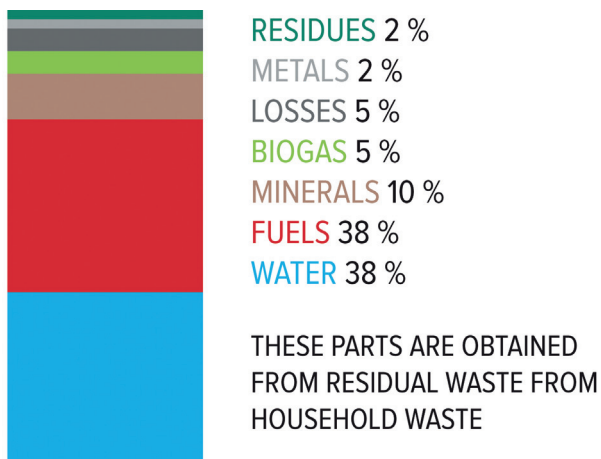
Air flows evenly through the waste products in tightly sealed concrete tunnels and supplies microorganisms with oxygen. The microorganisms feed on the organic components and produce heat energy.

This heat energy evaporates the water contained in the solids. Result: a homogeneous, dry and free-flowing solid, which in this dry state can easily be broken down into its individual components. Energy sources, minerals and metals.

5. Mechanical material separation

Sieving and sorting systems break down the dry, highly uniform, and free-flowing material into different grain-size categories. Adapted high-energy fuels and minerals are transported by selectively adjusted conveyor technology to the energy consumers.

These replace fossil resources, protect the environment and supply industries, thermal power stations or cement plants with inexpensive energy. The minerals can be recycled or landfilled. The high quality prevents harmful environmental effects. The limit values of the strict German landfill ordinance are widely undercut.



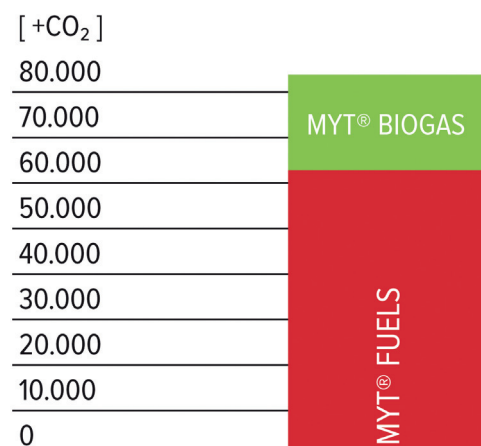
EFFICIENT, RELIABLE AND LOW-EMISSION SYSTEM, SUSTAINABLE AND COST-EFFECTIVE

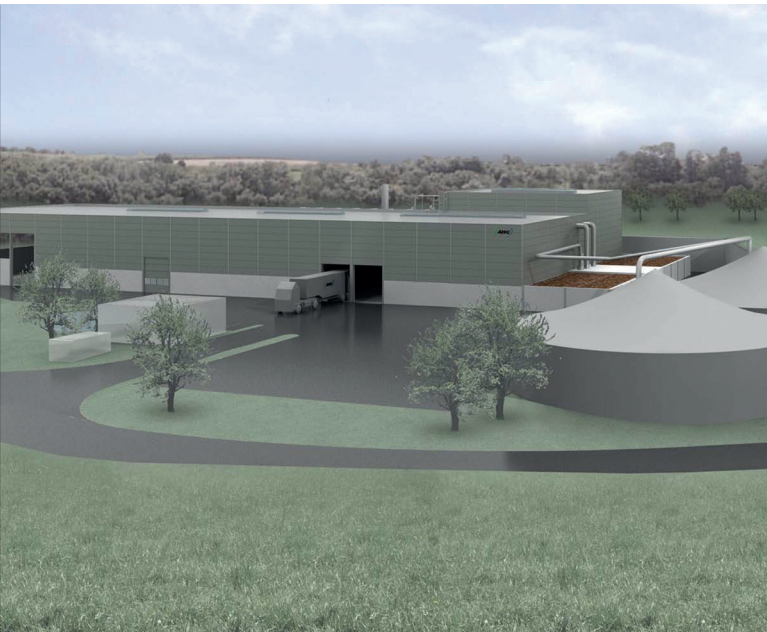
Energy balance

Maximum Yield Technology (MYT®) is a proven innovative process for maximising energy and resource recovery from household waste. The MYT® process recovers 97 % of the recyclable materials: water, minerals, metals, fuels and biogas. The mechanical-biological waste treatment plant of the Kahlenberg association in Ortenaukreis processes around 120.000 tons of domestic waste products per year. These have an energy potential of around 235.000 MWh/year with approximately the following energy proportions (these vary depending on the residual waste composition). The complete process operates with a self-sufficient power supply, i.e. all of the required energy is extracted from the generated biogas. The average energy consumption (electricity and heat) for a 4-person household in one home with average energy standards averages 19.000 kWh per year. Approximately 12.500 households can therefore be supplied with energy for a whole year with the energy potential of 120.000 tons of waste. 156.000 persons live in the administrative district of Emmendingen, which corresponds to 50.000 persons.

CO2-Savings potential from fuels and biogas

The use of around 120.000 tons of domestic waste products to replace fossil fuels (e.g. coal) saves 80,000 tons of environmentally damaging CO₂ per year.





Biological waste treatment plant Backnang



Energy technology investment Technische Werke Friedrichshafen

ORGANIC WASTE TREATMENT PLANTS + POWER ENGINEERING SYSTEMS

Environmental Technology, Architecture + Engineering

Environmental engineering and Project management from a single source. From engineering to commissioning. In sustainable, cost-effective, functionally aesthetic project architecture.

Organic waste treatment plants

Holistic project management of organic waste treatment plants. From the design and planning to the optimisation and/or renovation of running systems – our services are tailored to your needs. Complete planning of low-emission organic waste treatment plants for sustainable recycling of organic waste and the generation of quality assured fermentation products (compost and liquid fertiliser).

Power engineering systems

Our service offerings range from the concept and design to the call for tenders and construction management through to the commissioning of thermal power stations, combined heat and power plants, solar thermal energy, photovoltaic systems and environmental heating systems.